

REMARKS

Applicants would like to thank the Examiner for careful consideration of this application and continued patience in its prosecution. The claims entered by the Examiner from the Response and Amendment of February 27, 2006 are currently listed herein and amended as required by the Notice of Non-Compliant Amendment mailed November 3, 2006. Claims 1, 2, 4-10, 15, 20 and 21 are pending in this application. Independent Claim 1 has been amended and Claims 2, 4, 5-7, 9, 10, 15, 20 and 21 have been amended to attend to informalities. Claim 22 has been cancelled. Support for this amendment can be found in the Application as originally filed, specifically, on page 11, lines 8-10 and throughout the Examples. Applicants submit no new matter has been added.

Rejections under 35 USC 112

Claims 1, 2, 4-7, 15, 20, and 21 stand rejected under 35 USC 112, second paragraph as being indefinite for the use of the term "crosslinking agent" in independent Claim 1. The term cross-linking agent has been deleted from amended independent Claim 1 rendering the Examiner's rejection moot.

Claim 22 stands rejected under 35 USC 112, second paragraph as being indefinite for the use of the "methacrylates of polyhydric". Claim 22 has been cancelled rendering the Examiner's rejection moot.

Rejections under 35 USC 103

Claims 1, 2, 4-10, 15, 20 and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,127,488 to Obrecht, et al. (herein after "Obrecht") or it's foreign equivalent German Patent No. DE 19707487 (hereinafter "DE '487"), each in view of U.S. Patent No. 5,232,531 to Dammann, et al. (hereinafter "Dammann") or JP 57-212239 (hereinafter "JP '239") or JP 5-17630 (hereinafter "JP '630").

The Examiner alleges that Obrecht teaches rubber mixtures comprising double bond containing rubber and crosslinked rubber particles having the Applicant's claimed properties and that these mixtures are useful for producing vulcanisates and molded articles. The

Examiner concedes that Obrecht is silent as to the use of polyisocyanate as a crosslinking agent and contends that the secondary references teach that the use of polyisocyanates improves the physical properties of the rubber mixtures and was well known at the time of the invention. Applicants respectfully disagree.

"To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (Fed. Cir. 1974)". Applicants also respectfully submit that "In order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claims limitations. The teachings or suggestions to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicants' disclosure." See MPEP § 2142, citing In re Vaeck, 947 F.2d 488, 20 USPQ 2d. 1438 (Fed. Cir. 1991).

First and foremost, Obrecht or DE '487 fails to teach or suggest the use of a polyisocyanate crosslinking agent, and Applicants submit that Dammann, JP '239", or JP '630 fail to provide motivation to modify the process of Obrecht or DE '487 to arrive at the Applicants claimed invention. In particular, the current claimed invention is directed to rubber mixtures prepared from vulcanized rubbers, as recited in amended independent Claim 1 that may be used to make "cable sheaths, hoses, drive belts, conveyor belts, roller coverings, tire components, shoe soles, gaskets, damping elements, and membranes" as recited in Claim 10 and page 11, lines 10-12 of the Application as originally filed. One of ordinary skill in the art would not look to a method for making an adhesive as taught in Dammann, JP '239", or JP '630 to prepare a vulcanized rubber mixture because the improved physical property, namely adherence, is not an advantageous characteristic for a polymer used to make "cable sheaths, hoses, drive belts, conveyor belts, roller coverings, tire components, shoe soles, gaskets, damping elements, and membranes". In fact, a polymer that displays adherence properties would not be useful for the Applicants claimed

purpose because it is important that these articles not adhere to their surroundings. Therefore, this property would have a deleterious effect on the final product.

Moreover, one of ordinary skill in the art would not expect to prepare a rubber mixture prepared from vulcanized rubbers as recited in amended independent Claim 1 that does not have adhesive qualities. Dammann, JP '239", and JP '630 clearly teach that the use of polyisocyanate cross-linking agents result in polymers with adhesive qualities. Consequently, the vulcanized rubber mixtures of amended independent Claim 1 show surprising or unexpected qualities since they do not have these adhesive characteristics. Therefore, the skilled artisan would not expect to prepare a vulcanized rubber mixture useful for the production of "cable sheaths, hoses, drive belts, conveyor belts, roller coverings, tire components, shoe soles, gaskets, damping elements, and membranes" by combining the teachings of Obrecht or DE '487 with either Dammann, JP '239", or JP '630 because the vulcanized rubber mixture would be expected to have adhesive qualities.

Accordingly, the combination of Obrecht or DE '487 in view of either Dammann, JP '239", or JP '630 fails to render the current claimed invention obvious because there would be no motivation to combine the teachings of these reference to prepare a vulcanized rubber mixture useful for the claimed purpose, nor would the skilled artisan expect to prepare a vulcanized rubber mixture with properties suitable for the claimed purpose.

Claims 2, 4-7, 10, 15, 20 and 21 either directly or indirectly depend from and add further limitations to amended independent Claim 1 and are, respectfully, deemed allowable at least for the same reasons in combination with amended independent Claim 1. Reconsideration is respectfully requested.

It is believed that the pending claims are now in condition for allowance and notice to such effect is respectfully requested. Should the Examiner have any questions regarding this application, the Examiner is invited to initiate a telephone conference with the undersigned.

Respectfully submitted,

By

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